



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/062914 A2

(51) International Patent Classification: Not classified

(72) Inventor; and

(21) International Application Number:
PCT/US2004/043254

(75) **Inventor/Applicant (for US only): SAMADPOUR, Mansour** [US/US]; 6050 50th Avenue N.E., Seattle, WA 98155 (US).

(22) International Filing Date: 22 December 2004 (22.12.2004)

(74) Agents: DAVISON, Barry, L. et al.; 2600 Century Square,
1501 Fourth Avenue, Seattle, WA 98101-1688 (US).

(25) **Filing Language:** English

(81) Designated States (*unless otherwise indicated, for every kind of national protection available*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(26) **Publication Language:** English

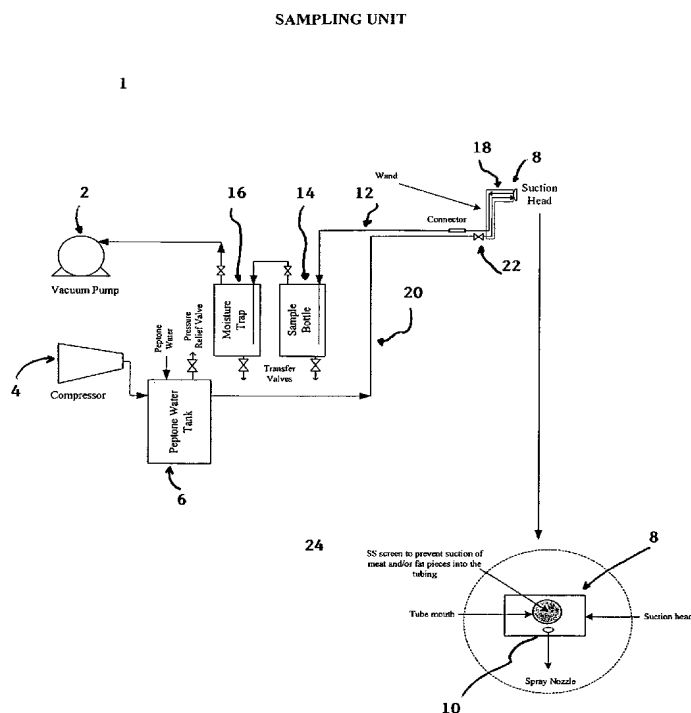
(30) Priority Data:
60/531,364 22 December 2003 (22.12.2003) US

(71) **Applicant** (for all designated States except US): **INSTITUTE FOR ENVIRONMENTAL HEALTH, INC.**
[US/US]; 15300 Bothell Way N.E., Lake Forest Park, WA
98155 (US).

(84) Designated States (*unless otherwise indicated, for every kind of regional protection available*): ARIPO (BW, GH,

[Continued on next page]

(54) Title: MICROBIAL SAMPLING DEVICE



(57) Abstract: Aspects of the present invention provide novel apparatus and methods for sampling microbial organisms present on surfaces. Preferred apparatus comprises: a reservoir suitable for providing microbial collection fluid; a sterilizable sample collection chamber; a sterilizable, integrated collection fluid delivery and collection fluid recovery member, suitable to deliver collection fluid to a target surface, and contemporaneously recover the delivered fluid from the surface; delivery means, in communication with both the reservoir and the integrated member, and operable to aseptically deliver collection fluid from the reservoir to the integrated member; and vacuum means, in communication with both the sample collection chamber and the integrated member, and operable to direct collection fluid, delivered and recovered by the integrated member, to the sample collection chamber. Additional aspects provide a method for rapid, high-throughput sampling of microbial organisms present on surfaces, comprising: delivering sample collection fluid to a target surface, and contemporaneously recovering the

delivered fluid from the target surface by means of an integrated collection fluid delivery and collection fluid recovery member; and collecting the recovered sample collection fluid into a sample collection chamber in communication with the integrated member, whereby sample collection is, at least in part, achieved. The inventive methods and apparatus can be applied to both surface sampling and to atmospheric sampling.

WO 2005/062914 A2



GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— *without international search report and to be republished upon receipt of that report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.